

# Mile High Times Sinclair

C/O FRANK HOLLAND, 1423 S. PEARL ST., DENVER CO 80210, 733-8103

JUNE 1987. The meeting is on the 25th, at 7:30 PM, at my home.

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If you are reading the hard-copy version of this you can see our new banner. If you are reading this on the BBS, you will have to check out the DOWNLOAD's for the graphic program that I used.

We have received a large number of 2068 programs in exchange with the Cleveland group. One of them was an "OLD ENGLISH" graphics program which I promptly used here to dress up the newsletter.

There are games, graphics, sound, math, and utilities. There is even one tape of SPECTRUM programs.

In Jan. I received a nice letter from Joe Williamson of FOOTE SOFTWARE. He explained that he was the editor of SUM and offered a newsletter exchange. However, the April mailing was returned, "NO FORWARDING ADDRESS" and we have not received any issues of SUM. Does anyone know what has happened to SUM and to FOOTE?

The April issue of TimeLinez and the May/June issue of Sincus both have excellent articles on converting the 2050 modem to an RS-232 interface. Reprints in the hard-copy, BBS readers can pick them up at the meeting.

I'm afraid this months newsletter is going to be a little short because of all the exchange tapes that came in from the Cleveland group. There were 23 cassettes (mostly c-60's) to copy and check, that took most of my free time. But the short newsletter is going to made up for with the number of 2068 programs we now have in the library (and soon to be on the BBS)

Till next month ----- FRANK

*Are we still exchanging - I haven't received a newsletter from you since March*

*Frank*

**BUILDING A RS-232 PORT INTO THE 2050 MODEM**

By Loren Latker

**DISCLAIMER:**

Neither this publication nor the author is responsible for any damage that may occur to your modem and/or computer if you attempt this project. Proceed at your own risk; and only if the warranty on the modem and computer have expired!

Zebra designed it: a small RS-232 circuit board to be added to the 2050 modem circuit board. The only drawback I could see to Zebra's kit was in not putting it inside the modem case.

Afterall, with an Oliger Mother board, printer interface, Disc boards, and the 2050 modem, my 2088 was taking control. Pfu! With having another modem, uncased or housed in some klunky box, adding to the clutter, I wanted something slightly smaller than my apartment, not larger!

Knowing a thing or two about switches - the common ordinary garden variety - I figured that with the simple addition of a 3PDT switch the whole Zebra Kit would fit inside the modem. The following is a step by step account of how I built the RS-232 circuit into the existing modem case with switch selectable RS-232 or modem functions.

The only deviation from the original Zebra kit instructions was that I cut off pins #3, #17 and #22 flush with the RS-232 PCB bottom and added some jumpers and the switch.

For the pins that go thru the RS-232 PCB I bought a couple 16 pin DIP Component Carriers from Radio Shack (part #275-1980), pulled the pins out and soldered them in the PCB.

Then on pins #3, #17 and #22 I cut off the bottoms. This left only the U shape section above for soldering jumpers to.

I made the trace cuts on the modem board wider than normal, and in an area where I could safely solder a wire to the trace. I added 8 jumpers. One each to pins #3, #17 and #22 of the 8251. One each to the traces that were cut - on the far side of the cut (opposite the 8251).

The final jumpers went to the tops of the header pins on the PCB (connected to IC 1, but cut off so no contact is made with the socket attached to the 8251). All the jumper wires go to a 3PDT mini switch. The diagram shows how to hook up the switch.

Next I drilled a hole in the modem case back panel (removable) and mounted the switch right next to power receptacle. I hard wired a ribbon cable directly into the PCB (see diagram) folded it over and ran it parallel to the modem cable for a bit - till it was outside the case area.

I purchased the lowest cost Break-out Adapter I could find (\$12.95 from Dick Smith Electronics; part #X-4000) and wired it up according to the modem eliminator configuration diagram.

Once everything was wired up I tested it. With the switch up

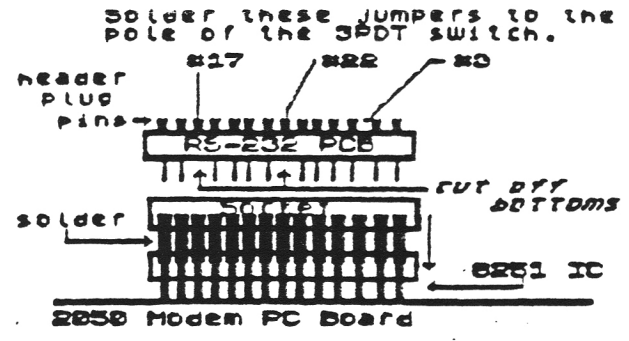
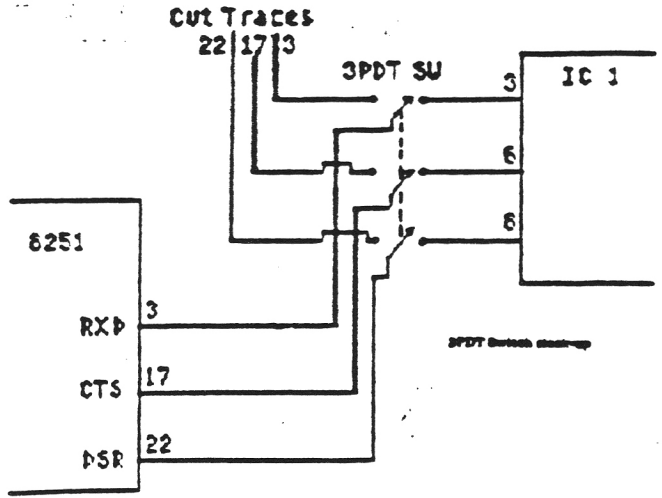


Fig. 1



Enlarged View of Pin Used

- OPTION a=0
- OPTION b=0
- OPTION c=0
- OPTION d=0
- OPTION e=1
- OPTION f=3
- OPTION g=1
- OPTION h=2
- OPTION i=1
- OPTION j=0
- OPTION k=0

Memorywriter Communication Option Settings  
To Allow Using The TS 2050 Modem/RS-232